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The Trusted Integrator for Sustainable Solutions

REMOVAL SUPPORT TEAM 3
EPA CONTRACT EP-S2-14-01

July 27, 2018

Mr. Joel Petty, On-Scene Coordinator
U.S. Environmental Protection Agency, Region II
Removal Action Branch
2890 Woodbridge Avenue
Edison, NJ 08837

EPA CONTRACT No: EP-S2-14-01

TDD No: TO-0370-0030

DC No: RST3-05-F-0009

**SUBJECT: FINAL REMOVAL ASSESSMENT SAMPLING REPORT
DEFERIET PAPER MILL SITE
DEFERIET, JEFFERSON COUNTY, NEW YORK**

Dear Mr. Petty,

Enclosed please find the Final Removal Assessment Sampling Report which summarizes the bulk suspect asbestos containing material (SACM) sampling event conducted by the U.S. Environmental Agency (EPA) with the support of Weston Solutions, Inc., Removal Support Team 3 (RST 3) at the Deferiet Paper Mill Site (the Site) located in Deferiet, Jefferson County, New York. The sampling event was performed on May 7 and 8, 2018. The comments made by EPA in regards to the previous version of this deliverable (DCN: RST3-05-D-0001) have been incorporated.

If you have any questions or comments, please contact me at (908) 565-2987.

Sincerely,

Weston Solutions, Inc.

Michael Beuthe, CHMM
RST 3 Site Project Manager

Enclosure
cc: TDD File: TO-0370-0030

an employee-owned company



In association with Scientific and Environmental Associates, Inc.,
Environmental Compliance Consultants, Inc., Avatar Environmental, LLC,
On-Site Environmental, Inc., and Sovereign Consulting, Inc.

FINAL REMOVAL ASSESSMENT SAMPLING REPORT

DEFERIET PAPER MILL SITE Deferiet, Jefferson County, New York

SSID No.: A26F
EPA ID No.: NYD002229169

DC No: RST3-05-F-0009
TDD No: TO-0370-0030
EPA Contract No: EP-S2-14-01

Prepared for:

U.S. Environmental Protection Agency
Region II – Removal Action Branch
2890 Woodbridge Avenue
Edison, New Jersey 08837

Prepared by:

Removal Support Team 3
Weston Solutions, Inc.
Federal East Division
Edison, New Jersey 08837

July 2018

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1.0 Introduction

On May 7 and 8, 2018, the U.S. Environmental Protection Agency (EPA), Region II Removal Action Branch (RAB), with the support of Weston Solutions, Inc., Removal Support Team 3 (RST 3), conducted a bulk suspect containing material (SACM) sampling event as part of a Removal Assessment at the Deferiet Paper Mill Site (the Site). Bulk samples of SACM were collected from several locations throughout the Site, and submitted to the assigned laboratory for asbestos analysis. The objective of the Removal Assessment was to verify the presence and determine the extent of asbestos containing material (ACM) at the Site.

1.1 Site Location and Description

The Site is located at 400 Anderson Avenue in Deferiet, Jefferson County, New York, which has a population of approximately 300 people. The Site is bordered to the north and west by residential properties and the Black River, and to the east and south by wooded areas, a tributary of the Black River, and open fields.

Refer to Attachment A, Figure 1: Site Location Map and Figure 2: Site Layout Map.

1.2 Site History and Background

The Site is the location of a former paper mill. The St. Regis Paper Company was started in 1899 in Deferiet, New York. In 1900 construction to build a paper mill commenced, along with the design of the Power Canal and the Village of Deferiet, to include houses, a school, public hall, general store, and a hotel. The original mill manufactured paper of varying types, including newsprint and glossy magazine paper. By 1921 the Village became incorporated while the mill still owned the houses. In 1948 expansion activities at the mill brought in boilers, an acid plant, enlargement of the sulfite process room, and modernization of the power plant. Beginning in 1953, the St. Regis Paper Company sold off the houses to individual owners. In 1984 the facility was sold to Champion Paper. In 1999 the western portion of the Site was sold to the Deferiet Paper Company, a subsidiary of Crabar Paper & Allied Products Corporation. The Deferiet Paper Company filed for bankruptcy in 2001 and the mill was closed. It was reopened in 2003 following purchase of the facility from Newstech, Inc. The mill was closed again in 2004 and in 2005 was sold to Deferiet Development, LLC. The facility was then scrapped and heavily salvaged. Portions of the machine room and turbine room were demolished leaving large areas of debris and rubble. Most buildings, with the exception of the hydropower plant, were allowed to fall into disrepair.

In March 1986, EPA and the New York State Department of Environmental Conservation (NYSDEC) conducted a preliminary assessment of the Site (listed as the St. Regis Paper Mills Company Site). Recommendations from a March 1986 NYSDEC letter and a March 1986 EPA review with further concurrence in January 1988, recommended no further action at the Site.

In November 2015, an attorney with Jefferson County requested EPA to evaluate the Site for threats associated with the release or threat of release of asbestos. Of particular concern was an easement utilized by personnel working at the hydropower plant. In February 2016, the removal program received a verbal authorization to proceed with a Removal Action (RV1) to address these concerns. In March 2016, EPA activated and mobilized their Emergency and Rapid Response Services (ERRS) contractors to apply a sealant on piping exposed in the easement. In addition, the removal action allowed for the subcontract of an engineering firm to develop a demolition plan,

should the Site warrant such activity. The Removal Action also recommended an assessment of areas outside of the easement to determine if asbestos was present in building materials, debris piles, partially demolished structures, equipment and other general locations throughout the Site. The Removal Action (RV1) was completed on August 30, 2016.

On June 6 and 7, 2017, EPA and RST 3 conducted the first phase (Phase I) of a Removal Assessment at the Site which consisted of an initial inspection of the property to identify SACM, along with any additional areas of concern (AOC), and the collection of 30 bulk SACM samples for asbestos analysis. During this assessment, more than 100 containers including two 4,500-gallon above ground storage tanks (ASTs), sixty 55-gallon drums, sixteen 300-gallon totes, and numerous smaller containers (5 gallons or less in size), were discovered in the former fire department, company garage, turbine room, and boiler house buildings.

From June 19 through 21, 2017, EPA and RST 3 performed the second phase (Phase II) of a Removal Assessment at the Site which consisted of conducting an inventory of the containers identified during Phase I of the assessment, performing hazard categorization (HazCat) field screening of the contents in each container, and sampling of containers selected by the EPA On-Scene Coordinator (OSC). Based on HazCat results, 23 solid, sludge, and liquid waste samples were collected from containers and submitted for laboratory analysis. The analytical results from the Phase II Removal Assessment indicated that Comprehensive Environmental Response Compensation and Liability Act (CERCLA) designated hazardous substances were present in the abandoned containers at the Site. Based on these results, the Site was determined to be eligible for an emergency Removal Action (RV2).

From July through November 2017, EPA conducted a Removal Action (RV2) at the Site during which abandoned containers were stabilized and removed from the Site. More than 150 drums and other containers were shipped off-site for disposal.

2.0 Scope of Work

RST 3 was tasked by EPA with collecting bulk SACM samples from several locations throughout the Site. Select samples in the easement area were associated with elevated structures and required the use of an articulating boom lift for sample collection. In addition, RST 3 was tasked with documenting estimated amounts of SACM in pipe insulation inside each building; providing photographic documentation and notation in the Site logbook of all site activities; entering sampling information into the EPA Scribe database, an environmental data management system; and documenting sampling locations with Global Position System (GPS) technology.

3.0 On-Site Personnel

Name	Affiliation	Duties On-site
Joel Petty	EPA, Region II	On-Scene Coordinator
Michael Beuthe	Weston Solutions, Inc. RST 3, Region II	Site Project Manager, Site H&S, Site QA/QC, Sample Collection, and Sample Management
Brando Chacon	Weston Solutions, Inc. RST 3, Region II	Sample Collection and Sample Management

EPA: U.S. Environmental Protection Agency
H&S: Health and Safety

RST 3: Removal Support Team 3
QA/QC: Quality Control/Quality Assurance

4.0 Summary of Site Activities and Observations

On May 7, 2018, RST 3 mobilized to the Site and conducted a Site walk with the EPA OSC to identify the locations of SACM samples collected during previous assessments. Following the Site walk, a representative from United Rental arrived on Site to deliver an articulating boom lift. On May 8, 2018, RST 3 collected bulk SACM samples from several locations throughout the Site, including the easement area, former company garage building, machine room, and multiple debris piles. The SACM that was sampled consisted of pipe insulation, brick, and mortar. Select SACM samples in the easement area included pipe insulation from elevated structures, and required the use of the articulating boom lift for sample collection. Following sample collection, EPA and RST 3 personnel surveyed the boiler room, machine room, wet beater room, and the former company garage building to estimate and document the amount pipe insulation containing SACM in each building.

A total of 2,205 linear feet of pipe insulation containing SACM was estimated in the surveyed buildings, including 300 linear feet in the turbine room, 400 linear feet in the former company garage building, 505 linear feet in the machine room, 300 linear feet in the wet/beater room, and 700 linear feet in the boiler room (400 linear feet on the first floor and 300 linear feet on the second floor). In addition, an estimated 1,900 square feet of insulation containing SACM appeared to be covering a large structure on the first floor of the boiler room. Furthermore, there is an area in the boiler room where an unmeasured stockpile of insulation containing SACM was observed during the Phase 1 Removal Assessment in June 2017.

Refer to Attachment C: Photographic Documentation Log, Attachment A, Figure 2: Site Layout Map and Figure 3: SACM Analytical Results and Pipe Insulation Estimates Map

5.0 Bulk SACM Sampling Methodology

All field work was performed in accordance with the RST 3 *Site-Specific Health and Safety Plan* (HASP), the RST 3 *Site-Specific Quality Assurance Project Plan* (QAPP), and EPA's Emergency Response Team (ERT)/Scientific, Engineering, Response & Analytical Services (SERAS) Standard Operation Procedures (SOPs) Number (No.) 2001: *General Field Sampling Guidelines*. The locations to be sampled were selected by the EPA OSC.

Sample collection procedures were dependent upon the location of the SACM, but generally, prior to sample collection, the area to be sampled and the sample to be collected were sprayed to wetness with a surfactant to prevent asbestos fibers, if present in the sampled material, from potentially becoming airborne. An approximately 2 to 3 inch section of the SACM was carefully cut from the building material using a safety utility knife. The SACM sample was carefully removed and placed into a re-sealable plastic bag. After sealing the SACM sample in the plastic bag, the exterior of the bag was wetted, wiped with a clean paper towel, and then placed into a second re-sealable plastic bag. An articulating boom lift was utilized for sample collection at elevated sample locations. All sample information was transcribed into EPA's Scribe database, from which sample labels and a chain of custody (COC) record were generated. The sample labels were affixed to the exterior of the plastic bag, and the samples were secured in a cooler for submission to the assigned laboratory.

6.0 Laboratory Receiving Samples

Laboratory	Sample Matrix	Analyses
EMSL Analytical, Inc. 200 Route 130 Cinnaminson, NJ 08077	SACM	Asbestos PLM/TEM

SACM: Suspect Asbestos Containing Material
PLM: Polar Light Microscopy

TEM: Transmission Electron Microscopy

7.0 Sample Collection and Dispatch

On May 8, 2018, RST 3 collected a total of 17 bulk SACM samples from several locations throughout the Site.

On May 10, 2018, all 17 bulk SACM samples were picked up by a laboratory courier from EMSL Analytical, Inc. (EMSL) under chain of custody (COC) record No. 050918-093511-0003, and transported to EMSL for asbestos analysis via the New York State (NYS) Environmental Laboratory Approved Program (ELAP) by polarized light microscopy (PLM) Method 198.1 if friable, NYS ELAP PLM Method 198.6 if non-friable, and NYS ELAP transmission electron microscopy (TEM) Method 198.4 if PLM results are less than (<) 1.0 percent (%).


Refer to Attachment D: Chain of Custody Record

8.0 Analytical Results Summary

Validated analytical results of the bulk SACM samples analyzed for asbestos were compared with the EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) which defines ACM as materials containing more than 1 percent (%) asbestos. Based on validated analytical results, seven of the 17 SACM samples were reported as non-detect. Eight of the 10 samples detected with asbestos contained Amosite asbestos ranging from 2.56% to 15.8%, nine samples contained Chrysotile asbestos ranging from <1.0 % to 30.8%, and three samples contained Crocidolite asbestos ranging from 4.88% to 7.69%.

Refer to Attachment A, Figure 3: SACM Analytical Results and Pipe Insulation Estimates Map, Attachment B, Table 1: Sample Collection and Validated Analytical Results Summary Table – Asbestos, and Attachment E: Validated Laboratory Analytical Data


Report prepared by:


Michael Beuthe, CHMM
RST 3 Site Project Manager

7/27/2018

Date

Report reviewed by:


Bernard Nwosu
RST 3 Group Leader

7/27/2018

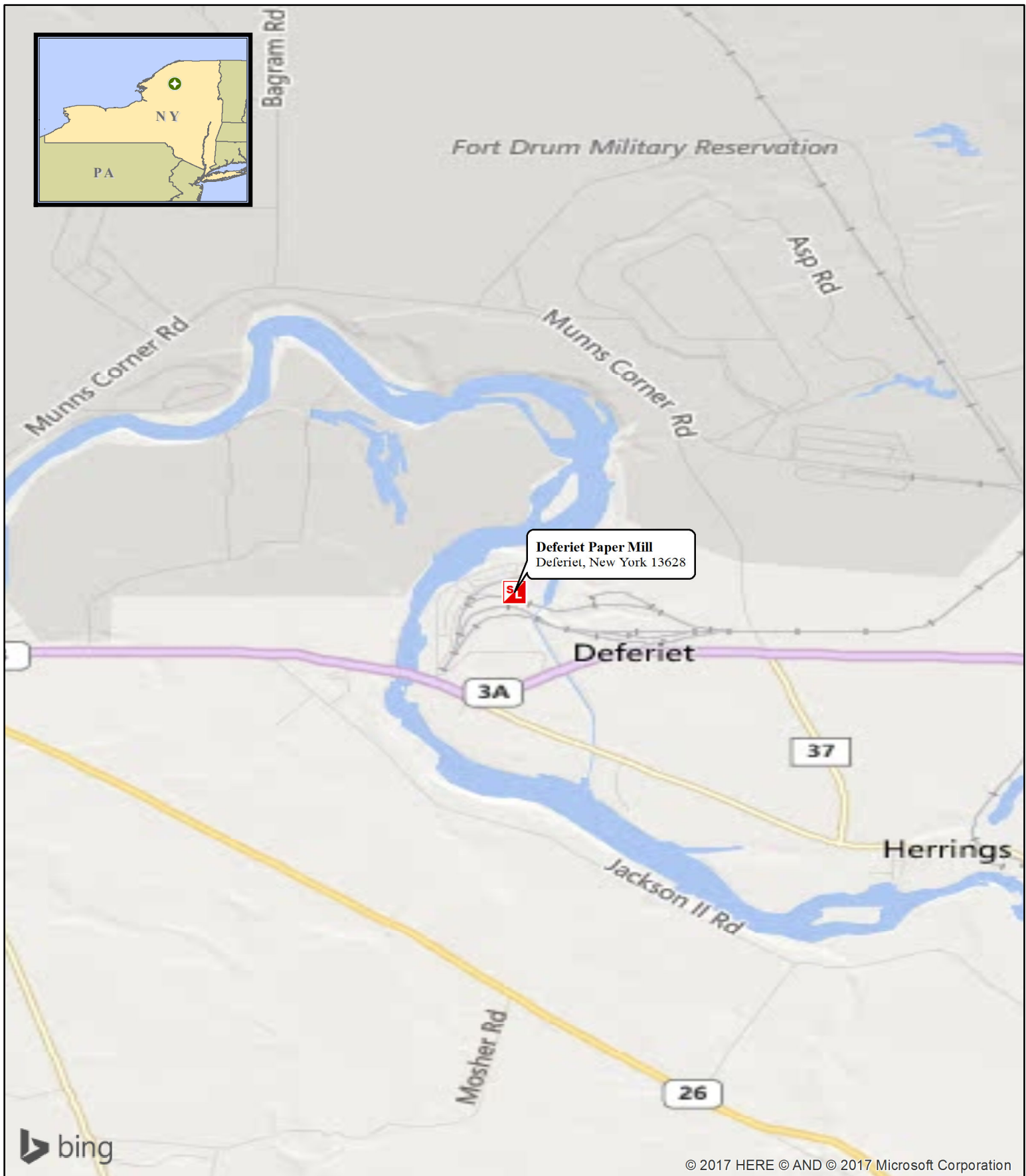
Date

Attachment A

Figure 1: Site Location Map

Figure 2: Site Layout Map

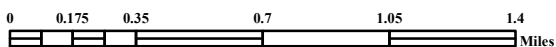
Figure 3: SACM Analytical Results and Pipe Insulation Estimates Map



Legend



Site Location



Weston Solutions, Inc.
East Division

In Association With
Scientific and Environmental Associates, Inc.,
Environmental Compliance Consultants, Inc.,
Avatar Environmental, LLC, On-Site Environmental,
Inc. and Sovereign Consulting, Inc

Figure 1: Site Location Map

Deferiet Paper Mill Site
Deferiet, New York

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 3
CONTRACT # EP-S2-14-01

DATE MODIFIED: 5/31/2017	GIS ANALYST: M. Beuthe
EPA OSC: K. Glenn	RST SPM: M. Beuthe
FILENAME: 20170531_SITELOCATIONMAP.MXD	

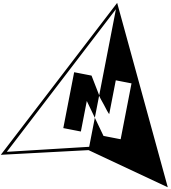


SCALE

1:1,500

LEGEND

-  Site Locations
-  Easement Area



**FIGURE 2:
Site Layout Map**

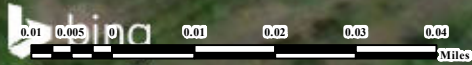
Deferiet Paper Mill Site
Deferiet, NY

UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY
REMOVAL SUPPORT TEAM 3
CONTRACT # EP-S2-14-01

Weston Solutions, Inc.

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Scientific and Environmental Associates, Inc.,
Environmental Compliance Consultants, Inc.,
Avatar Environmental, LLC, On-Site Environmental,
Inc., and Sovereign Consulting, Inc.

GIS ANALYST:	M. BEUTHE
EPA OSC:	K. GLENN
RST 2 SPM:	M. BEUTHE
FILENAME:	20170628_SITELAYOUTMAP.MXD
FIGURE	2
REVISION	0
DATE MODIFIED	6/28/2017





SCALE
1:665

LEGEND
Site Locations
Easement Area

SACM Samples Collected from the First Floor and Ground Level - No Asbestos Detected.
SACM Samples Collected from the First Floor and Ground Level - Asbestos Detected.
SACM Samples Collected from Elvated Locations - Asbestos Detected

Notes
SACM -Suspected Asbestos Containing Material
ND - Non-Detect
Sample Results greater than 1% asbestos are presented in red font.

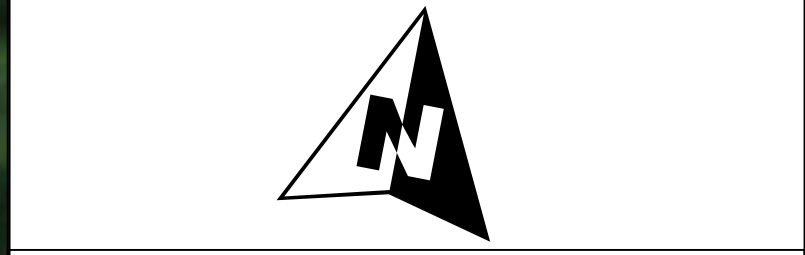


Figure 3: SACM Analytical Results and Pipe Insulation Estimates Map

Deferiet Paper Mill Site
Deferiet, NY

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 3
CONTRACT # EP-S2-14-01

Weston Solutions, Inc.
In Association With
Scientific and Environmental Associates, Inc.,
Environmental Compliance Consultants, Inc.,
Avatar Environmental, LLC, On-Site Environmental, Inc., and Sovereign Consulting, Inc.

GIS ANALYST:	M. BEUTHE
EPA OSC:	K. GLENN
RST 3 SPM:	M. BEUTHE
FILENAME:	180606 SACMRESULTS.MXD
FIGURE:	3
REVISION:	0
DATE MODIFIED:	7/20/2018



Attachment B

Table 1: Sample Collection and Validated Analytical Results Summary Table - Asbestos

Table 1: Sample Collection and Validated Analytical Results Summary Table - Asbestos
Deferiet Paper Mill Site
Deferiet, Jefferson County, New York
June 7, 2017

RST 3 Sample Number	P001-BULK020A-01	P001-BULK031-01	P001-BULK032-01	P001-BULK033-01	P001-BULK034-01	P001-BULK035-01
Material Description	Insulation	Insulation	Insulation	Crushed Insulation	Brick Surface	Insulation
Location	Machine Room	Easement	Easement	Easement	Easement	Maintenance Garage
Sub-Location	First Floor	Outside Machine Room, Ground Level	Outside Turbine Room, Ground Level	Outside Machine Room, Ground Level	First Floor	Northern Storage Room
Sampling Date	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018
Sample Matrix	Bulk SACM	Bulk SACM	Bulk SACM	Bulk SACM	Bulk SACM	Bulk SACM
Results						
Non-Asbestos: Appearance	Yellow, Friable, Homogenous	Gray, Friable, Homogeneous	Gray, Friable, Homogenous	White, Friable, Homogenous	Gray, Friable, Homogenous	White, Friable, Homogenous
Non-Asbestos: % Fibrous Material	10.00% Synthetic, 10.00% Glass	NA	NA	20.00% Min. Wool	NA	NA
Non-Asbestos: % Non-fibrous Material	80.00% Non-fibrous (Other)	73.36% Non-fibrous (Other)	78.94% Non-fibrous (Other)	69.75% Non-fibrous (Other)	100.00% Non-fibrous (Other)	92.30% Non-fibrous (Other)
Asbestos: % Type	None Detected	6.67% Amosite, 13.30% Chrysotile, 6.67% Crocidolite	15.80% Amosite, 5.26% Chrysotile	2.56% Amosite, 7.69% Crocidolite	None Detected	3.85% Amosite, 3.85% Chrysotile

RST 3 Sample Number	P001-BULK036-01	P001-BULK037-01	P001-BULK038-01	P001-BULK039-01	P001-BULK040-01	P001-BULK041-01
Material Description	Insulation	Insulation	Rock Material	Mortar	Insulation	Insulation
Location	Debris Pile	Debris Pile	Debris Pile	Debris Pile	Debris Pile	Easement
Sub-Location	Near Turbine Room	Near Turbine Room	Near Turbine Room	Near Turbine Room	Near Administration Building 1	Outside of Machine Room, 15 ft. High
Sampling Date	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018
Sample Matrix	Bulk SACM	Bulk SACM	Bulk SACM	Bulk SACM	Bulk SACM	Bulk SACM
Results						
Non-Asbestos: Appearance	Brown/Gray, Friable, Heterogeneous	Grey/Yellow, Friable, Homogenous	Gray, Friable, Homogenous	Gray, Friable, Homogenous	Gray/Yellow, Friable, Homogenous	White, Friable, Homogenous
Non-Asbestos: % Fibrous Material	NA	90% glass	NA	NA	90% Glass	NA
Non-Asbestos: % Non-fibrous Material	100.00% Non-fibrous (Other)	10% Non-fibrous (Other)	100.00% Non-fibrous (Other)	100.00% Non-fibrous (Other)	10% Non-fibrous (Other)	92.16% Non-fibrous (Other)
Asbestos: % Type	None Detected	None Detected	None Detected	None Detected	None Detected	5.88% Amosite, 1.96% Chrysotile

RST 3 Sample Number	P001-BULK042-01	P001-BULK043-01	P001-BULK044-01	P001-BULK045-01	P001-BULK046-01
Material Description	Insulation	Insulation	Insulation	Insulation	Insulation
Location	Easement	Easement	Easement	Maintenance Garage	Machine Room
Sub-Location	Outside of Machine Room, 25 ft. High	Outside Boiler Room, 30 ft. High	Between Machine and Wet Beater Room, 30 ft. High	Northern Area, 20 ft. High	Debris Pile
Sampling Date	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018
Sample Matrix	Bulk SACM	Bulk SACM	Bulk SACM	Bulk SACM	Bulk SACM
Results					
Non-Asbestos: Appearance	White, Friable, Homogenous	Gray/White, Friable, Homogenous	Gray, Friable, Homogenous	White, Friable, Homogenous	Tan, Friable, Homogeneous
Non-Asbestos: % Fibrous Material	NA	40.00% Hair	NA	NA	NA
Non-Asbestos: % Non-fibrous Material	90.24% Non-fibrous (Other)	45.72% Non-fibrous (Other)	85.70% Non-fibrous (Other)	86.67% Non-fibrous (Other)	69.20% Non-fibrous (Other)
Asbestos: % Type	4.88% Amosite, < 1% Chrysotile, 4.88% Crocidolite	7.14% Amosite, 7.14% Chrysotile	14.30% Chrysotile	10.00% Amosite, 3.33% Chrysotile	30.80% Chrysotile

Notes:
RST 3 - Removal Support Team 3
SACM - Suspected Asbestos Containing Material
% - Percent
NA - Not Applicable
* All samples were analyzed by polar light microscopy (PLM) and/or transmission electron microscopy (TEM).
* Analytical results compared with the U.S. Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants (NESHAP) which defines asbestos containing material (ACM) as material containing more than 1% asbestos.
Results greater than 1% asbestos are reported in bold red font.

Attachment C

Photographic Documentation Log



Photograph 1: View, facing north, of Weston Solutions, Inc., Removal Support Team 3 (RST 3) personnel collecting bulk suspect asbestos containing material (SACM) sample P001-BULK031-01 from pipe insulation near the exterior of machine room, in the vicinity of the easement area.



Photograph 2: View, facing west, of bulk SACM sample location P001-BULK032 located near the exterior of the turbine room, in the vicinity of the easement area.

**Photographic Documentation Log
Deferiet Paper Mill Site
Deferiet, Jefferson County, New Jersey
May 2018**



Photograph 3: View of P001-BULK035 located in the northern storage room of the company garage building.



Photograph 4: View, facing south, of P001-BULK039 located in a debris pile adjacent to the turbine room.

**Photographic Documentation Log
Deferiet Paper Mill Site
Deferiet, Jefferson County, New Jersey
May 2018**



Photograph 5: View, facing northwest, of P001-BULK041 and P001-BULK042 located near the exterior of the machine room, in the vicinity of the easement area.



Photograph 6: View, facing south, of P001-BULK043 located on the exterior of the boiler room, in the vicinity of the easement area.



Photograph 7: View, facing northwest, of P001-BULK044 located near the exterior of the machine room, in the vicinity of the easement area.



Photograph 8: View, facing northeast, of P001-BULK045 located in the company garage building, after sample collection.

Attachment D

Chain of Custody Record

DateShipped: 5/10/2018

CarrierName: Lab Courier

Airbill No: N/A

CHAIN OF CUSTODY RECORD

Case# 488

Contact Name: Michael Beuthe

Contact Phone: 732-585-4447

No: 050918-093511-0003

Cooler #: 1 of 1

Lab: EMSL Analytical, Inc.

Lab Phone: 856-858-4800

[illegible]

Special Instructions: Analyze for Bulk Asbestos via NYS ELAP PLM-METHOD 198.1. If not friable then the NYS ELAP -METHOD 198.6, if <1.0% then the laboratory will follow up with NYS ELAP TEM-METHOD 198.4.

TAT= 7 days preliminary, 14 days validated. EMAIL results to: S.Sumbaly@westonsolutions.com and Michael.Beuthe@westonsolutions.com

Note:

SACM - Suspect Asbestos Containing Material

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All samples/ All Gas cylinders	Brenda Chace Weston RST 3	5/10/18 1300	[Signature]	05-10-18 / 13:48	

Attachment E

Validated Laboratory Analytical Data



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www.westonsolutions.com

The Trusted Integrator for Sustainable Solutions

REMOVAL SUPPORT TEAM 3
EPA CONTRACT EP-S2-14-01

RST 3-04-F-0138

TRANSMITTAL MEMO

To: Mr. Joel Petty, On-Scene Coordinator
Removal Action Branch
U.S. EPA, Region II

From: Smita Sumbaly, Data Reviewer
RST 3, Region II

Subject: Deferiet Paper Mill Site
Data Validation Assessment

Date: June 25, 2018

The purpose of this memo is to transmit the following information:

- Data validation results for the following parameters:

Asbestos PLM	17 Samples
--------------	------------
- Matrices and Number of Samples

Bulk	17 Samples
------	------------
- Sampling Date: May 8, 2018

The final data assessment narrative and original analytical data package are attached.

cc:	RST 3 SPM:	Michael Beuthe
	RST 3 SITE FILE TDD #:	TO-0010-0044
	RST 3 ANALYTICAL TDD #:	TO-0010-0167
	TASK#:	4167



U.S. ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

DATE: June 25, 2018

TO: Joel Petty, On-Scene Coordinator
U.S. EPA, Region II

FROM: Smita Sumbaly
RST 3 Data Review Team

SUBJECT: QA/QC Compliance Review Summary

As requested quality control and performance measures for the data packages noted have been examined and compared to U.S. Environmental Protection Agency (EPA) standards for compliance. Measures for the following general areas were evaluated as applicable:

Data Completeness
Sample Collection, Holding Times, and Preservation
Blank Analysis
Sample Sensitivity
Monthly Report PLM Calibrations

Any statistical measures used to support the following conclusions are attached so that the review may be reviewed by others.

Summary of Results

	<u>Asbestos</u> <u>PLM</u>
Acceptable as Submitted	<u>X</u>
Acceptable with Comments	<u> </u>
Unacceptable, Action Pending	<u> </u>
Unacceptable	<u> </u>

Data Reviewed by: Smita Sumbaly 

Date: 6/25/2018

Approved By: 

Date: 6/25/2018

Area Code/Phone No.: (732) 585-4410

NARRATIVE

Task No. 4167

SITE NAME: Deferiet Paper Mill Site
400 Anderson Way,
Village of Deferiet, New York

Laboratory Name: EMSL Analytical, Inc., 200 Route 130 North, Cinnaminson, NJ 08077.

INTRODUCTION:

The laboratory's portion of this case consisted of 17 bulk presumed asbestos-containing material (PACM) samples. All samples were collected on May 8, 2018. The EMSL Order ID number is 041814163.

The laboratory reported No problem(s) with the receipt of these samples.

The laboratory reported No problems with the analyses of Asbestos PLM samples.

The evaluator has commented on the criteria specified under each fraction heading. All criteria have been assessed, but no discussion is given where the evaluator has determined that criteria were adequately performed or require no comment. Details relevant to these comments are given on the following forms.

Appropriate Form Is and Chain of Custody have been copied from the original data package and appended to the data assessment narrative for reference.

STANDARD OPERATING PROCEDURE

Page 1 of 3

Title: Evaluation of Asbestos Data
Data Assessment Narrative

RFP #: 488/Task#: 4167**Site: Deferiet Paper Mill Site****Contractor: Weston Solutions, Inc., Removal Support Team 3 (RST 3)****Reviewer: SMITA SUMBALY****Matrix/No. of Samples: Bulk-17****A.2.1 Validation Flags-**

The following flags have been applied in red by the data validator and must be considered by the data user.

J-

This flag indicates the result qualified as estimated.

Red- Line-

A red-line drawn through a sample result indicates an unusable value. The red-lined data are known to contain significant errors based on documented information and must not be used by the data user.

Fully Usable Data-

The results that do not carry "J" or "red-line" are fully usable.

A.2.2 The data assessment is given below and on the attached sheets.

On May 8, 2018, Environmental Protection Agency (EPA) Region II and RST 3 personnel collected 17 bulk presumed asbestos-containing material (PACM) samples from the Deferiet Paper Mill Site, located at 400 Anderson Way, the Village of Deferiet, Jefferson County, New York. On May 10, 2018, all the samples were picked by courier services from EMSL Analytical, Inc., 200 Route 130 North, Cinnaminson, New Jersey. The laboratory verified that the samples were received intact and properly custody sealed.

All 17 friable bulk PACM samples were analyzed by Polarized Light Microscopy (PLM) using the procedures from the PLM New York State (NYS) environmental laboratory approval program (ELAP) 198.1 Method. The PACM samples were found to contain asbestos and subject to a stratified point count method. Data was reported as percent (%) asbestos. The quantification limit for the method is <1.0% (stratified point count/400 point count).

Client identification (ID) and laboratory ID numbers are as follows:

<u>Client ID No.</u>	<u>Laboratory ID No.</u>	<u>Matrix</u>	<u>Sampling Date</u>	<u>Analysis</u>
P001-BULK020A-01	041814163-0001	Bulk	5/08/2018	Asbestos PLM
P001-BULK031-01	041814163-0002	Bulk	5/08/2018	Asbestos PLM
P001-BULK032-01	041814163-0003	Bulk	5/08/2018	Asbestos PLM
P001-BULK033-01	041814163-0004	Bulk	5/08/2018	Asbestos PLM
P001-BULK034-01	041814163-0005	Bulk	5/08/2018	Asbestos PLM
P001-BULK035-01	041814163-0006	Bulk	5/08/2018	Asbestos PLM

STANDARD OPERATING PROCEDURE

Page 2 of 3

Title: Evaluation of Asbestos Data
Data Assessment Narrative

<u>Client ID No.</u>	<u>Laboratory ID No.</u>	<u>Matrix</u>	<u>Sampling Date</u>	<u>Analysis</u>
P001-BULK036-01	041814163-0007	Bulk	5/08/2018	Asbestos PLM
P001-BULK037-01	041814163-0008	Bulk	5/08/2018	Asbestos PLM
P001-BULK038-01	041814163-0009	Bulk	5/08/2018	Asbestos PLM
P001-BULK039-01	041814163-0010	Bulk	5/08/2018	Asbestos PLM
P001-BULK040-01	041814163-0011	Bulk	5/08/2018	Asbestos PLM
P001-BULK041-01	041814163-0012	Bulk	5/08/2018	Asbestos PLM
P001-BULK042-01	041814163-0013	Bulk	5/08/2018	Asbestos PLM
P001-BULK043-01	041814163-0014	Bulk	5/08/2018	Asbestos PLM
P001-BULK044-01	041814163-0015	Bulk	5/08/2018	Asbestos PLM
P001-BULK045-01	041814163-0016	Bulk	5/08/2018	Asbestos PLM
P001-BULK046-01	041814163-0017	Bulk	5/08/2018	Asbestos PLM

Asbestos PLM analysis of Bulk by NY State ELAP 198.1:

All 17 bulk samples were analyzed by PLM using the procedures from the PLM NYS ELAP 198.1 Method. All PLM data was reported on a percent asbestos basis. Out of the 17 samples, seven samples were reported as none detected; eight samples were reported to contain between 2.56% to 15.8% Amosite asbestos; nine samples were reported to contain between <1.0% to 30.8% Chrysotile asbestos; and three samples were reported to contain between 4.88% to 7.69% Crocidolite asbestos.

QC Analysis

All quality control (QC) was performed in compliance with EMSL's Quality Assurance (QA) Manual. The laboratory also submitted daily reference slide, PLM calibration, and PLM calibration and contamination record.

A.2.3 Contract Problem/Non-Compliance:

None

Contractor Reviewer:

Signature:

Date:

Verified by:

Signature:

Date:

ASBESTOS DATA FOR BULK

Project: Deferiet Paper Mill Site

Sampling Date: May 8, 2018

PLM NYS Method 198.1 - Friable					
Client Sample ID Number	Laboratory Sample ID Number	Color	Non-Asbestos		Asbestos PLM NYS 198.1 Friable
			Fibrous	Non-Fibrous	
P001-BULK020A-01	041814163-0001	Yellow	10.00% Synthetic 10.00% Glass	80.00% Non-fibrous (other)	None Detected
P001-BULK031-01	041814163-0002	Gray	-	73.36% Non-fibrous (other)	6.67% Amosite 13.30% Chrysotile 6.67% Crocidolite 26.64% Total
P001-BULK032-01	041814163-0003	Gray	-	78.94% Non-fibrous (other)	15.80% Amosite 5.26% Chrysotile 21.06% Total
P001-BULK033-01	041814163-0004	White	20.00% Min. Wool	69.75% Non-fibrous (other)	2.56% Amosite 7.69% Crocidolite 10.25% Total
P001-BULK034-01	041814163-0005	Gray	-	100.00% Non-fibrous (other)	None Detected
P001-BULK035-01-	041814163-0006	White	-	92.30% Non-fibrous (other)	3.85% Amosite 3.85% Chrysotile 7.70% Total
P001-BULK036-01	041814163-0007	Brown/Gray	-	100.00% Non-fibrous (other)	None Detected
P001-BULK037-01	041814163-0008	Gray/Yellow	90.00% Glass	10.00% Non-fibrous (other)	None Detected
P001-BULK038-01	041814163-0009	Gray	-	100.00% Non-fibrous (other)	None Detected
P001-BULK039-01	041814163-0010	Gray	-	100.00% Non-fibrous (other)	None Detected
P001-BULK040-01	041814163-0011	Gray/Yellow	90.00% Glass	10.00% Non-fibrous (other)	None Detected
P001-BULK041-01	041814163-0012	White	-	92.16% Non-fibrous (other)	5.88% Amosite 1.96% Chrysotile 7.84% Total
P001-BULK042-01	041814163-0013	White	-	90.24% Non-fibrous (other)	4.88% Amosite <1% Chrysotile 4.88% Crocidolite 9.76% Total
P001-BULK043-01	041814163-0014	Gray/White	40.00% Hair	45.72% Non-fibrous (other)	7.14% Amosite 7.14% Chrysotile 14.28% Total
P001-BULK044-01	041814163-0015	Gray	-	85.70% Non-fibrous (other)	14.30% Chrysotile
P001-BULK045-01	041814163-0016	White	-	86.67% Non-fibrous (other)	10.00% Amosite 3.33% Chrysotile 13.33% Total
P001-BULK046-01	041814163-0017	Tan	-	69.20% Non-fibrous (other)	30.80% Chrysotile



EMSL ANALYTICAL, INC.

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 858-4960

May 23, 2018

Smita Sumbaly
Weston Solutions, Inc.
1090 King Georges Post Road, Suite 201
Edison, NJ 08837
732-585-4400
s.sumbaly@westonsolutions.com

Re: PLM NYS ELAP 198.1; EMSL Order: 041814163; RFP #488

Dear Smita:

On May 10, 2018, EMSL Analytical, Inc. in Cinnaminson, NJ received seventeen (17) bulk samples for asbestos content analysis via PLM NYS ELAP 198.1 analysis. The samples were received via FedEx and were logged in following normal lab procedures. The samples were received under Chain of Custody No. 050918-093511-0003 from Weston Solutions, Inc.

PLM NYS ELAP 198.1

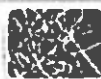
All submitted samples were friable materials. All friable bulk samples were analyzed via Polarized Light Microscopy (PLM) using the procedures from the PLM NYS ELAP 198.1 method. All data was reported on a percent asbestos basis with a limit of quantification for the PLM NYS ELAP 198.1 method (stratified point count/400 point count) as <1%. Per this method, any sample found to contain asbestos was subject to a stratified point count.

QC Performed

All QC was performed in compliance with EMSL's Quality Assurance Manual.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. In addition, I certify, that to the best of my knowledge and belief, the data as reported are true and accurate. Release of the data contained in this data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Darrah Johnson-McDaniel
Assistant Asbestos Laboratory Manager
EMSL Cinnaminson, NJ



**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com>cinnaslab@EMSL.com

EMSL Order: 041814163

CustomerID: RFWE53

CustomerPO: 0097014

ProjectID: RFP 488

Attn: **Michael Beuthe**
Weston Solutions (King Georges Post)
1090 King Georges Post Road
Suite 201
Edison, NJ 08837

Phone: (732) 585-4400
 Fax:
 Received: 05/10/18 7:35 PM
 Analysis Date: 5/17/2018
 Collected: 5/8/2018

Project: RFP #488

Test Report:Asbestos Analysis of Bulk Material

Test		Analyzed Date	Color	Non Asbestos		
				Fibrous	Non-Fibrous	Asbestos
Sample ID	P001-BULK020A-01 041814163-0001		Description			
			Homogeneity	Homogeneous		
PLM NYS 198.1 Friable	5/17/2018	Yellow	10.00% Synthetic 10.00% Glass	80.00% Non-fibrous (other)		None Detected
PLM NYS 198.6 VCM						Not Analyzed
PLM NYS 198.6 NOB						Not Analyzed
TEM NYS 198.4 NOB						Not Analyzed
Sample ID	P001-BULK031-01 041814163-0002		Description			
			Homogeneity	Homogeneous		
PLM NYS 198.1 Friable	5/17/2018	Gray		73.36% Non-fibrous (other)		6.67% Amosite 13.30% Chrysotile 6.67% Crocidolite 26.64% Total
PLM NYS 198.6 VCM						Not Analyzed
PLM NYS 198.6 NOB						Not Analyzed
TEM NYS 198.4 NOB						Not Analyzed
Sample ID	P001-BULK032-01 041814163-0003		Description			
			Homogeneity	Homogeneous		
PLM NYS 198.1 Friable	5/17/2018	Gray		78.94% Non-fibrous (other)		15.80% Amosite 5.26% Chrysotile 21.06% Total
PLM NYS 198.6 VCM						Not Analyzed
PLM NYS 198.6 NOB						Not Analyzed
TEM NYS 198.4 NOB						Not Analyzed
Sample ID	P001-BULK033-01 041814163-0004		Description			
			Homogeneity	Homogeneous		
PLM NYS 198.1 Friable	5/17/2018	White	20.00% Min. Wool	69.75% Non-fibrous (other)		2.56% Amosite 7.69% Crocidolite 10.25% Total
PLM NYS 198.6 VCM						Not Analyzed
PLM NYS 198.6 NOB						Not Analyzed
TEM NYS 198.4 NOB						Not Analyzed

Initial Report From 05/17/2018 15:39:54

Test Report 198VCM-7.30.0 Printed: 5/17/2018 3:39:54 PM

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**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

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<http://www.EMSL.com> cinnaslab@EMSL.com

EMSL Order: 041814163

CustomerID: RFWE53

CustomerPO: 0097014

ProjectID: RFP 488

Test Report: Asbestos Analysis of Bulk Material**Non Asbestos**

Test	Color	Fibrous	Non-Fibrous	Asbestos
Sample ID P001-BULK034-01 041814163-0005	Description Homogeneity	Homogeneous		
PLM NYS 198.1 Friable 5/17/2018	Gray		100.00% Non-fibrous (other)	None Detected
PLM NYS 198.6 VCM				Not Analyzed
PLM NYS 198.6 NOB				Not Analyzed
TEM NYS 198.4 NOB				Not Analyzed
Sample ID P001-BULK035-01 041814163-0006	Description Homogeneity	Homogeneous		
PLM NYS 198.1 Friable 5/17/2018	White		92.30% Non-fibrous (other)	3.85% Amosite 3.85% Chrysotile 7.70% Total
PLM NYS 198.6 VCM				Not Analyzed
PLM NYS 198.6 NOB				Not Analyzed
TEM NYS 198.4 NOB				Not Analyzed
Sample ID P001-BULK036-01 041814163-0007	Description Homogeneity	Homogeneous		
PLM NYS 198.1 Friable 5/17/2018	Brown/Gray		100.00% Non-fibrous (other)	None Detected
PLM NYS 198.6 VCM				Not Analyzed
PLM NYS 198.6 NOB				Not Analyzed
TEM NYS 198.4 NOB				Not Analyzed
Sample ID P001-BULK037-01 041814163-0008	Description Homogeneity	Homogeneous		
PLM NYS 198.1 Friable 5/17/2018	Gray/Yellow	90.00% Glass	10.00% Non-fibrous (other)	None Detected
PLM NYS 198.6 VCM				Not Analyzed
PLM NYS 198.6 NOB				Not Analyzed
TEM NYS 198.4 NOB				Not Analyzed
Sample ID P001-BULK038-01 041814163-0009	Description Homogeneity	Homogeneous		
PLM NYS 198.1 Friable 5/17/2018	Gray		100.00% Non-fibrous (other)	None Detected
PLM NYS 198.6 VCM				Not Analyzed
PLM NYS 198.6 NOB				Not Analyzed
TEM NYS 198.4 NOB				Not Analyzed
Sample ID P001-BULK039-01 041814163-0010	Description Homogeneity	Homogeneous		
PLM NYS 198.1 Friable 5/17/2018	Gray		100.00% Non-fibrous (other)	None Detected
PLM NYS 198.6 VCM				Not Analyzed
PLM NYS 198.6 NOB				Not Analyzed
TEM NYS 198.4 NOB				Not Analyzed

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Test Report 198VCM-7.30.0 Printed: 5/17/2018 3:39:54 PM

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**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

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EMSL Order: 041814163

CustomerID: RFWE53

CustomerPO: 0097014

ProjectID: RFP 488

Test Report: Asbestos Analysis of Bulk Material

Test		Color		Non Asbestos		Asbestos
				Fibrous	Non-Fibrous	
Sample ID	P001-BULK040-01	Description				
	041814163-0011	Homogeneity	Homogeneous			
PLM NYS 198.1 Friable	5/17/2018	Gray/Yellow	90.00% Glass		10.00% Non-fibrous (other)	None Detected
PLM NYS 198.6 VCM						Not Analyzed
PLM NYS 198.6 NOB						Not Analyzed
TEM NYS 198.4 NOB						Not Analyzed
Sample ID	P001-BULK041-01	Description				
	041814163-0012	Homogeneity	Homogeneous			
PLM NYS 198.1 Friable	5/17/2018	White			92.16% Non-fibrous (other)	5.88% Amosite 1.96% Chrysotile 7.84% Total
PLM NYS 198.6 VCM						Not Analyzed
PLM NYS 198.6 NOB						Not Analyzed
TEM NYS 198.4 NOB						Not Analyzed
Sample ID	P001-BULK042-01	Description				
	041814163-0013	Homogeneity	Homogeneous			
PLM NYS 198.1 Friable	5/17/2018	White			90.24% Non-fibrous (other)	4.88% Amosite <1% Chrysotile 4.88% Crocidolite 9.76% Total
PLM NYS 198.6 VCM						Not Analyzed
PLM NYS 198.6 NOB						Not Analyzed
TEM NYS 198.4 NOB						Not Analyzed
Sample ID	P001-BULK043-01	Description				
	041814163-0014	Homogeneity	Homogeneous			
PLM NYS 198.1 Friable	5/17/2018	Gray/White	40.00% Hair		45.72% Non-fibrous (other)	7.14% Amosite 7.14% Chrysotile 14.28% Total
PLM NYS 198.6 VCM						Not Analyzed
PLM NYS 198.6 NOB						Not Analyzed
TEM NYS 198.4 NOB						Not Analyzed
Sample ID	P001-BULK044-01	Description				
	041814163-0015	Homogeneity	Homogeneous			
PLM NYS 198.1 Friable	5/17/2018	Gray			85.70% Non-fibrous (other)	14.30% Chrysotile
PLM NYS 198.6 VCM						Not Analyzed
PLM NYS 198.6 NOB						Not Analyzed
TEM NYS 198.4 NOB						Not Analyzed

Initial Report From 05/17/2018 15:39:54

Test Report 198VCM-7.30.0 Printed: 5/17/2018 3:39:54 PM

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**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

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<http://www.EMSL.com> cinnaslab@EMSL.com

EMSL Order: 041814163

CustomerID: RFWE53

CustomerPO: 0097014

ProjectID: RFP 488

Test Report: Asbestos Analysis of Bulk Material**Non Asbestos**

Test		Color	Fibrous	Non-Fibrous	Asbestos
Sample ID	P001-BULK045-01 041814163-0016	Description			
		Homogeneity	Homogeneous		
PLM NYS 198.1 Friable	5/17/2018	White		86.67% Non-fibrous (other)	10.00% Amosite 3.33% Chrysotile 13.33% Total
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed
Sample ID	P001-BULK046-01 041814163-0017	Description			
		Homogeneity	Homogeneous		
PLM NYS 198.1 Friable	5/17/2018	Tan		69.20% Non-fibrous (other)	30.80% Chrysotile
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed

Analyst(s)

Andrew Castellano


Benjamin Ellis, Laboratory Manager
or other approved signatory

NOB = Non Friable Organically Bound N/A = Not Applicable VCM = Vermiculite Containing Material

-In New York State, TEM is currently the only method that can be used to determine if NOB materials can be considered or treated as non-asbestos containing.
All samples examined for the presence of vermiculite when analyzed via NYS 198.1.

-NYS Guidelines for Vermiculite containing samples are available at http://www.wadsworth.org/labcert/elapcert/forms/VermiculiteInterimGuidance_Rev070913.pdf

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples were received in good condition unless otherwise noted.

This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. This report may contain data that is not covered by the NVLAP accreditation.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NYS ELAP 10872, PA ID# 68-00367

Initial Report From 05/17/2018 15:39:54

Test Report 198VCM-7.30.0 Printed: 5/17/2018 3:39:54 PM

THIS IS THE LAST PAGE OF THE REPORT.

Page 4

Purchase Order #: 0097014

Page 1 of 1

USEPA

Date Shipped 5/10/2018

Carrier Name Lab Courier

Airbill No. N/A

CHAIN OF CUSTODY RECORD

RFP# Case # 488

Contact Name Michael Beuthe

Contact Phone 732-565-4447

No: 050918-093511-0003

Cooler # 1 of 1

Lab: EMSL Analytical, Inc.

Lab Phone 856-858-4800

041814163

Lab #	Sample #	Sample Type	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	Lab QC
	P001-BULK020A-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	17:55	1	Poly Bag	None	N
	P001-BULK031-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	08:45	1	Poly Bag	None	N
	P001-BULK032-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	09:00	1	Poly Bag	None	N
	P001-BULK033-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	09:09	1	Poly Bag	None	N
	P001-BULK034-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	09:10	1	Poly Bag	None	N
	P001-BULK035-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	10:45	1	Poly Bag	None	N
	P001-BULK036-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	11:00	1	Poly Bag	None	N
	P001-BULK037-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	11:05	1	Poly Bag	None	N
	P001-BULK038-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	11:30	1	Poly Bag	None	N
	P001-BULK039-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	11:32	1	Poly Bag	None	N
	P001-BULK040-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	11:40	1	Poly Bag	None	N
	P001-BULK041-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	14:20	1	Poly Bag	None	N
	P001-BULK042-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	14:23	1	Poly Bag	None	N
	P001-BULK043-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	14:32	1	Poly Bag	None	N
	P001-BULK044-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	14:45	1	Poly Bag	None	N
	P001-BULK045-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	15:30	1	Poly Bag	None	N
	P001-BULK046-01	Field Sample	Asbestos PLM/TEM	Bulk SACM	5/8/2018	17:50	1	Poly Bag	None	N

Special Instructions: Analyze for Bulk Asbestos via NYS ELAP PLM-METHOD 198.1. If not friable then the NYS ELAP -METHOD 198.6. If <1.0% then the laboratory will follow up with NYS ELAP TEM-METHOD 198.4

TAT= 7 days preliminary, 14 days validated. EMAIL results to: S.Sumbaly@westonsolutions.com and Michael Beuthe@westonsolutions.com

Note:

SACM - Suspect Asbestos Containing Material

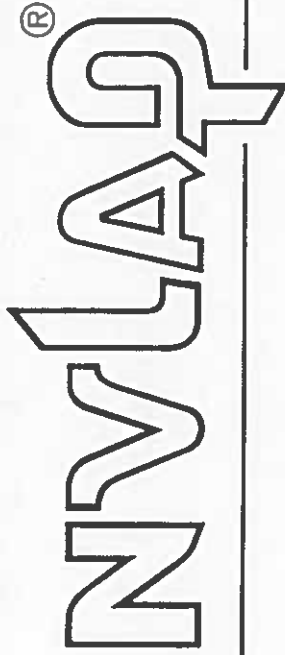
SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
All Samples / All analysis	Bob Allen Weston RST 3	5/10/18 13:50	[Signature]	05-10-18 / 13:58	
	[Signature]	05-10-18 / 19:25	[Signature]	5/10/18 7:35	

1724

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101048-0

EMSL Analytical, Inc.
Cinnaminson, NJ

is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:

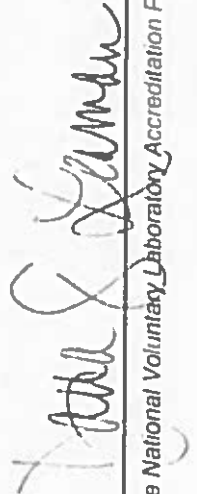
Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2017-07-01 through 2018-06-30

Effective Dates




For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077
Mr. Ben Ellis
Phone: 800-220-3675 Fax: 856-786-5973
Email: bellis@emsl.com
<http://www.emsl.com>

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 101048-0

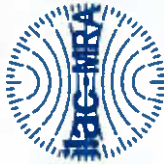
Bulk Asbestos Analysis

<u>Code</u>	<u>Description</u>
18/A01	EPA — Appendix E to Subpart E of Part 763 — Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

<u>Code</u>	<u>Description</u>
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A

For the National Voluntary Laboratory Accreditation Program



AIHA Laboratory Accreditation Programs, LLC

acknowledges that

EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Laboratory ID: 100194

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories* in the following:

LABORATORY ACCREDITATION PROGRAMS

- | | |
|--|---|
| <input checked="" type="checkbox"/> INDUSTRIAL HYGIENE | Accreditation Expires: September 01, 2018 |
| <input checked="" type="checkbox"/> ENVIRONMENTAL LEAD | Accreditation Expires: September 01, 2018 |
| <input checked="" type="checkbox"/> ENVIRONMENTAL MICROBIOLOGY | Accreditation Expires: September 01, 2018 |
| <input type="checkbox"/> FOOD | Accreditation Expires: |
| <input type="checkbox"/> UNIQUE SCOPES | Accreditation Expires: |

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

William Walsh

William Walsh, CIH
Chairperson, Analytical Accreditation Board

Revision 15: 03/30/2016

Cheryl O. Morton

Cheryl O. Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Date Issued: 08/31/2016

IHLAP Scope Category	Field of Testing (FoT) (FoTs cover all relevant IH matrices)	Technology sub-type/ Detector	Published Reference Method/Title of In-house Method	Method Description or Analyte (for internal methods only)
Spectrometry Core	Atomic Absorption	CVAA	OSHA ID-140 Modified	
			OSHA ID-145	
		FAA	NIOSH 7082	
		GFAA	NIOSH 7105	
	Inductively-Coupled Plasma	ICP/MS	NIOSH 7300 Modified	
		ICP/AES	NIOSH 7300 Modified	
	X-ray Diffraction (XRD)		NIOSH 7500 Modified	
Asbestos/Fiber Microscopy Core			OSHA ID-142 Modified	
	UV/VIS (Colorimetric)		NIOSH 6010 Modified	
	Polarized Light Microscopy (PLM)		EPA 600/R-93/116	
	Phase Contrast Microscopy (PCM)		NIOSH 7400	
	Transmission Electron Microscopy (TEM)		EPA AHERA - 40 CFR Part 763	EPA AHERA Method (40 CFR 763, Subpart E, Appendix A, Mandatory Method)
Miscellaneous Core	Gravimetric		NIOSH 7402	
			NIOSH 0500	
			NIOSH 0600	
	Thermo-optical Analysis (TOA)		NIOSH 5524	
			NIOSH 5040	
Beryllium Testing	Inductively-Coupled Plasma	ICP/MS	NIOSH 7300	
			NIOSH 7303	

A complete listing of currently accredited Industrial Hygiene laboratories is available on the AIHA-LAP, LLC website at:
<http://www.aihaaccreditedlabs.org>



AIHA Laboratory Accreditation Programs, LLC

SCOPE OF ACCREDITATION

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077

Laboratory ID: **100194**
Issue Date: 04/13/2017

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

Industrial Hygiene Laboratory Accreditation Program (IHLAP)

Initial Accreditation Date: 02/01/1989

IHLAP Scope Category	Field of Testing (FoT) (FoTs cover all relevant IH matrices)	Technology sub-type/ Detector	Published Reference Method/Title of In-house Method	Method Description or Analyte (for internal methods only)
Chromatography Core	Gas Chromatography	GC/FID	NIOSH 1003 Modified	
			NIOSH 1005	
			NIOSH 1400 Modified	
			NIOSH 1500 Modified	
			NIOSH 1501 Modified	
			NIOSH 1550 Modified	
			NIOSH 1603 Modified	
			NIOSH 2000 Modified	
		GC/ECD	NIOSH 5502 Modified	
			NIOSH 5503 Modified	
			NIOSH 5510 Modified	
			OSHA 1010 Modified	
	GC/MS	GC/MS	EPA TO-15	
	Gas Chromatography (Diffusive Samplers)		NIOSH 1501 Modified	
	Ion Chromatography (IC)		NIOSH 6004 Modified	
			NIOSH 6011	
			NIOSH 7903	
			OSHA ID-165SG	
			OSHA ID-214	
			OSHA ID-215 Modified	
	Liquid Chromatography	HPLC/FL	NIOSH 2016 Modified	
		HPLC/UV	NIOSH 5506 Modified	
		HPLC/MS	NIOSH 9111 Modified	
Spectrometry Core	Atomic Absorption	CVAA	NIOSH 6009 Modified	